

DAFTAR PUSTAKA

- Achparaki, M., Thessalonikeos, E., Tsoukali, H., Mastrogianni, O., Zaggelidou, E., Chatzinikolaou, F., Vasilliades, N., Raikos, N., Isabirye, M., Raju, D. V. N., Kitutu, M., Yemeline, V., Deckers, J., & J. Poesen Additional. (2012). We are IntechOpen , the world ' s leading publisher of Open Access books Built by scientists , for scientists TOP 1 % . *Intech*, 13.
<http://dx.doi.org/10.1039/C7RA00172J%0Ahttps://www.intechopen.com/books/advanced-biometric-technologies/liveness-detection-in-biometrics%0Ahttp://dx.doi.org/10.1016/j.colsurfa.2011.12.014>
- Andoorfar, S., Hosseini Tafreshi, S. A., & Rezvani, Z. (2019). Assessment of the expression level of miRNA molecules using a semi-quantitative RT-PCR approach. *Molecular Biology Reports*, 46(5), 5057–5062. <https://doi.org/10.1007/s11033-019-04959-5>
- Aw, R., & Polizzi, K. M. (2013). Can too many copies spoil the broth? *Microbial Cell Factories*, 12(1), 1–9. <https://doi.org/10.1186/1475-2859-12-128>
- Aw, R., & Polizzi, K. M. (2016). Liquid PTVA: A faster and cheaper alternative for generating multi-copy clones in *Pichia pastoris*. *Microbial Cell Factories*, 15(1), 1–11. <https://doi.org/10.1186/s12934-016-0432-8>
- Biosci, I. J., Ahmed, R., Aeksiri, N., Pongcharoen, P., Sujipuli, K., & Biosci, I. J. (2018). Influences of plasmid forms and electric pulses on transformation efficiency in yeast using electroporation. *International Journal of Biosciences (IJB)*, 12(4), 188–195. <https://doi.org/10.12692/ijb/12.4.188-195>
- Buck, C. B., Day, P. M., & Trus, B. L. (2013). The papillomavirus major capsid protein L1. *Virology*, 445(1–2), 169–174. <https://doi.org/10.1016/j.virol.2013.05.038>

- Buonaguro, F. M., & Buonaguro, L. (2014). Virus-like particles in vaccine development. *Virus-like Particles in Vaccine Development*, 9(10), 1–136. <https://doi.org/10.2217/9781780844176>
- Byrne, B. (2015). Pichia pastoris as an expression host for membrane protein structural biology. *Current Opinion in Structural Biology*, 32, 9–17. <https://doi.org/10.1016/j.sbi.2015.01.005>
- Chen, W. C., Kerr, R., May, A., Ndlovu, B., Sobalisa, A., Duze, S. T., Joseph, L., Mathew, C. G., & Babb De Villiers, C. (2018). The Integrity and Yield of Genomic DNA Isolated from Whole Blood Following Long-Term Storage at -30°C. *Biopreservation and Biobanking*, 16(2), 106–113. <https://doi.org/10.1089/bio.2017.0050>
- Chen, Z., Schiffman, M., Herrero, R., DeSalle, R., Anastos, K., Segondy, M., Sahasrabudde, V. v., Gravitt, P. E., Hsing, A. W., Chan, P. K. S., & Burk, R. D. (2018). Classification and evolution of human papillomavirus genome variants: Alpha-5 (HPV26, 51, 69, 82), Alpha-6 (HPV30, 53, 56, 66), Alpha-11 (HPV34, 73), Alpha-13 (HPV54) and Alpha-3 (HPV61). *Virology*, 516(December 2017), 86–101. <https://doi.org/10.1016/j.virol.2018.01.002>
- Fisher, J. K., Bourniquel, A., Prentiss, M., & Kleckner, N. (2011). *Book > DNA Replication , Recombination & Repair* (Issue mod 3).
- Gaffar, S. (2010). Produksi Protein Rekombinan dalam Sistem Ekspresi Pichia pastoris. In *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis* (Vol. 53, Issue 9). <http://publications.lib.chalmers.se/records/fulltext/245180/245180.pdf%0Ahttps://hdl.handle.net/20.500.12380/245180%0Ahttp://dx.doi.org/10.1016/j.jsames.2011.03.003%0Ahttps://doi.org/10.1016/j.gr.2017.08.001%0Ahttp://dx.doi.org/10.1016/j.precamres.2014.12>

- Ganeva, V., Galutzov, B., & Teissie, J. (2014). Evidence that pulsed electric field treatment enhances the cell wall porosity of yeast cells. *Applied Biochemistry and Biotechnology*, 172(3), 1540–1552. <https://doi.org/10.1007/s12010-013-0628-x>
- Gissman, L., Borruto, F., & Ridder, M. de. (2018). HPV and Cervical Cancer: Achievements in Prevention and Future Prospects. In *Angewandte Chemie International Edition*, 6(11), 951–952.
- Herawati, N. (2015). *Pichia pastoris : YEAST PENGHASIL PROTEIN TERAPEUTIK DAN VAKSIN MANUSIA*. 1(1), 14–17.
- Invitrogen. (2010). pPICZ A , B , and C Pichia expression vectors for selection on blasticidin and purification of ii. *In Vitro*, 25.
- Invitrogen. (2014). EasySelect™ Pichia Expression Kit For Expression of Recombinant Proteins Using pPICZ and pPICZα in Pichia pastoris. *Life Technologies*, 25, 1–95.
- KALKHORAN, Sara; BENOWITZ, Neal L .; RIGOTTI, N. A. (2018). 乳鼠心肌提取 HHS Public Access. *Revista Del Colegio Americano de Cardiologia*, 72(23), 2964–2979. <https://doi.org/10.1016/bs.adgen.2014.10.003>. Electroporation-Mediated
- Karbalaei, M., Rezaee, S. A., & Farsiani, H. (2020). Pichia pastoris: A highly successful expression system for optimal synthesis of heterologous proteins. *Journal of Cellular Physiology*, 235(9), 5867–5881. <https://doi.org/10.1002/jcp.29583>
- Khaleghi, R., & Asad, S. (2021). Heterologous expression of recombinant urate oxidase using the intein-mediated protein purification in Pichia pastoris. *3 Biotech*, 11(3), 1–11. <https://doi.org/10.1007/s13205-021-02670-6>
- Marisch, K., Bayer, K., Cserjan-Puschmann, M., Luchner, M., & Striedner, G. (2013). Evaluation of three industrial Escherichia coli strains in fed-batch

- cultivations during high-level SOD protein production. *Microbial Cell Factories*, 12(1), 1–11. <https://doi.org/10.1186/1475-2859-12-58>
- National Cancer Institute. (2021). *Human Papillomavirus (HPV) Vaccines*. <https://www.cancer.gov/about-cancer/causes-prevention/risk/infectious-agents/hpv-vaccine-fact-sheet>
- Patrick Higgins, V., & Vologodskii, A. v. (2015). Topological Behavior of Plasmid DNA. *Plasmids: Biology and Impact in Biotechnology and Discovery*, 3(2), 105–131. <https://doi.org/10.1128/9781555818982.ch7>
- Rosano, G. L., & Ceccarelli, E. A. (2014). Recombinant protein expression in Escherichia coli: Advances and challenges. *Frontiers in Microbiology*, 5(APR), 1–17. <https://doi.org/10.3389/fmicb.2014.00172>
- Schwarzans, J. P., Wibberg, D., Winkler, A., Luttermann, T., Kalinowski, J., & Friehs, K. (2016). Integration event induced changes in recombinant protein productivity in Pichia pastoris discovered by whole genome sequencing and derived vector optimization. *Microbial Cell Factories*, 15(1), 1–15. <https://doi.org/10.1186/s12934-016-0486-7>
- Srivastava, N. (2018). Production of food-processing enzymes from recombinant microorganisms. In *Enzymes in Food Biotechnology: Production, Applications, and Future Prospects*. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-813280-7.00043-8>
- Stanley, M. (2016). Human Papillomavirus Vaccines. *The Vaccine Book: Second Edition*, 245–263. <https://doi.org/10.1016/B978-0-12-802174-3.00013-8>
- Sunga, A. J., Tolstorukov, I., & Cregg, J. M. (2008). Posttransformational vector amplification in the yeast Pichia pastoris. *FEMS Yeast Research*, 8(6), 870–876. <https://doi.org/10.1111/j.1567-1364.2008.00410.x>
- Takaku, H., Miyajima, A., Kazama, H., Sato, R., Ara, S., Matsuzawa, T., Yaoi, K., Araki, H., Shida, Y., Ogasawara, W., & Yamazaki, H. (2020). A novel

electroporation procedure for highly efficient transformation of *Lipomyces starkeyi*. *Journal of Microbiological Methods*, 169(November 2019), 105816. <https://doi.org/10.1016/j.mimet.2019.105816>

World Health Organization. (2017). *INFORMATION SHEET OBSERVED RATE OF VACCINE REACTIONS HUMAN PAPILLOMA VIRUS VACCINE*.

https://www.who.int/vaccine_safety/initiative/tools/HPV_vaccine_rates_information_sheet_1217.pdf